

TITLE

MICROCHEMICAL METHOD AND APPARATUS FOR SYNTHESIS AND 5 COATING OF COLLOIDAL NANOPARTICLES

ABSTRACT

10 The present invention represents a radical departure from most conventional
macro-scale batch processing methods employed to synthesize and coat colloidal
nanoparticles. Synthesis and coating are in series and *in-situ*, obviating the need for
numerous cumbersome, and often expensive intermediate-processing steps. In one
embodiment, the invention is a method and apparatus for synthesizing colloidal
nanoparticles. In another embodiment, the invention is a method and apparatus for
15 enabling coating of colloidal nanoparticles using an electrophoretic switch for contacting
and separating said colloid nanoparticles.

3579805_1.DOC